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EXAMINER

BONSHOCK, DENNIS G

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,803

Applicant(s)

OTTESEN ET AL.

Examiner

Dennis G. Bonshock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Final Rejection

Response to Amendment

1. It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 12-07-2005.

2. Claims 1-28 have been examined.

Status of Claims:

3. Claims 1, 2, 4-9, 12, 14-17, 19, 21, 22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ding, Patent #5,883,823 and Law, Patent #5,671,020.

4. Claims 3, 10, 11, 13, 18, 20, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyamada et al., Patent #5,617,333, hereinafter Oyamada, Law, and Ding, Patent #5,883,823.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 13, 20, and 28 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims were amended to include the limitation of disabling data recovery

on the hard disk, prior to retrieving data, however, there was no support for this limitation pointed to by the applicant, nor could the examiner find any support in the specification.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12, 14, 16, 17, and 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "tangible signal bearing medium" of claim 12 and its dependents, is referred to in the specification at page 7 which indicates that the "medium" can be interpreted as "information conveyed to a computer by a communications medium". Such an embodiment can include "information downloaded from the Internet and other networks". Thus it is clear that the "medium" claims are intended to be claims of mere information.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1, 2, 4-9, 12, 14-17, 19, 21, 22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ding, Patent #5,883,823 and Law, Patent #5,671,020.

9. With regard to claim 1, which teaches a method for processing multimedia data, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. With regard to claim 1, which further teaches indexing the multimedia data to an i by j matrix; and storing a plurality of odd/event index sequences of the i by j matrix in a data storage device, Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory.

Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index

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sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different location, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

10. With regard to claim 2, which teaches the multimedia data selected from still image data and video image data, Ding further teaches, in column 1, lines 17-23, the use of still images, and the use of video data.

11. With regard to claim 4, which teaches multimedia data representing an image having i times j pixels, Ding teaches, in column 8, lines 24-35, the multimedia data being represented by y time x pixels.

12. With regard to claims 5 and 14, which teach an image having i times j sub-images and wherein the i by j matrix corresponds to the i times j sub-images, Ding teaches, in column 8, lines 24-35, the multimedia data being represented by y time x blocks.

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13. With regard to claims 6 and 15, which teach compressing the sub-images before storing the i by j matrix on a hard drive, and decompressing the reconstructed i by j matrix to render the image, Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image to display on a monitor. Ding teaches, in column 4, line 12 through column 5, line 15, the storing utilizing odd/even indexing being part of the IDCT algorithm, where, column 9, lines 40-62 and column 7, lines 11-25, discusses the process of reversing the prior process of the conversion, specifically providing the output to a inverse DCT converter for reversing the operation performed by the DCT converter. Ding further teaches, in column 5, lines 59-64, utilizing the computation of the inverse discrete cosine transform during video encoding or video compression and/or video decoding or video decompression, where the IDCT algorithm as shown above comprises indexing the matrix into odd/even sequences.

14. With regard to claims 7, 16, and 21, which teach the odd/even index sequences comprising: and odd/odd, odd/even, even/odd, and even/even index sequencing, Ding further teaches, in column 4, lines 60-66 and figure 7, odd/even index sequencing in which there are four index groups even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column.

15. With regard to claim 8, which teaches index sequences being stored in logic blocks on a hard disk drive and wherein each of the index sequences is separately stored in respective logic blocks, Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of

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logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence.

16. With regard to claims 9, 17, and 22, which teach each index sequence stored in one or more logic blocks on a hard disk drive and wherein each logic block contains portions of at most two different index sequences, Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 2 index sequence.

17. With regard to claim 12, which teaches a signal bearing medium, comprising a program which, when executed by a processor, performs a method comprising: indexing the multimedia data to an i by j matrix; and storing a plurality of odd/even index sequences of the i by j matrix on a hard disk drive, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding further teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Furthermore, as admitted by the applicant "Ding

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discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients” and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn’t specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different location, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

18. With regard to claim 19, which teaches a server system for processing multimedia data, Ding teaches, a processor (see column 6, lines 35-38), a memory (see

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column 6, lines 35-38), one or more storage devices for storing multimedia data (see column 6, lines 9-38). With regard to claim 19, further teaching indexing the multimedia data to an i by j matrix; and storing a plurality of odd/even index sequencing of the i by j matrix, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding further teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory.

Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system

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that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different location, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

19. With regard to claims 24, 25, and 26, which teach retrieving data comprising the stored index sequences from the data storage device and reconstructing the I by j matrix utilizing odd/even index sequencing of the retrieved data, Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image from storage to display on a monitor.

20. With regard to claim 27, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column,

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even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image from storage to display on a monitor. Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would

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have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different location, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 3, 10, 11, 13, 18, 20, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyamada et al., Patent #5,617,333, hereinafter Oyamada, Law, and Ding, Patent #5,883,823.

23. With regard to claims 3, 13, and 20, Ding teaches a system that provides for compressing image and video data for storage in memory, which includes a hard drive (see column 35-38), but doesn't disclose disabling a data recovery procedure programmed on the data storage device, Oyamada teaches a system placing image and video data into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 3, lines 20-51, disabling the default data recovery procedure of retransmitting the data, and to use a system of estimating the block with it's associated

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blocks. Oyamada teaches, in column 2, lines 46 through column 3, lines 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image (see column 1, lines 7-20 and column 3, lines 19-51). It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of data correction is needed.

24. With regard to claim 10, Ding teaches a system that provides for compressing image and video data, but doesn't disclose when logic is flawed, assigning one or more fixed values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video data into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 10, lines 14-45, replacing flawed data with a selected substitution block stored in memory. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image

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processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

25. With regard to claims 11, 18, and 23, Ding teaches a system that provides for compressing image and video data, but doesn't disclose when logic is flawed, interpolating one or more replacement values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video data into blocks (see column 3, lines 8-50), similar to that of Ding, but further teaches, in column 1, lines 15-19, when data has been lost interpolating with a substitution data. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

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26. With regard to claim 28, Ding teaches a system that provides for compressing image and video data, but doesn't disclose disabling a data recovery procedure, or when logic is flawed, assigning one or more fixed values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video data into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 2, lines 46 through column 3, lines 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image (see column 1, lines 7-20, column 3, lines 19-51, and in column 10, lines 14-45). It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of data correction is needed.

Response to Arguments

27. The arguments filed on 12-07-2005 have been fully considered but they are not persuasive. Reasons set forth below.

28. The applicants' argue that the "logic blocks" are sufficiently defined in the specification.

29. In response, the examiner has withdrawn the 112 rejection directed a "logic blocks".

30. The applicants' argue that making claims 12, 14, 16, 17, and 25, recite a "tangible signal-bearing medium" removes them from 101 status.

31. In response, the examiner respectfully submits that these claims must be interpreted for what was disclosed in the original specification, which defines this "medium" to be "information conveyed to a computer by a communications medium", leaving the claim directed to non-statutory subject matter (see the last line of page 6 and page 7).

32. The applicants' argue that the reference do not teach "storing a plurality of odd/even index sequence of the i by j matrix on a hard drive having a plurality of logic blocks, wherein at least two odd/even index sequences are stored in separate logic blocks of the hard disk drive."

33. In response, the examiner respectfully submits that Ding teaches, in column 6, lines 1-13 and lines 49-67, storing the digital video in a RAID (redundant array of

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inexpensive disks), which is known in the art to comprise hard disk drives, similar to the ones previously described in the reference. Ding's use of a RAID further points toward the same goal of the claimed invention by spreading data out over different memory units in order to better tolerate faults/errors. Law supplements this teaching of Ding by further providing the storing in different portions of the memory, as opposed to the duplication in all memory regions of Ding.

34. The applicants' argue that Ding and Law are only directed to the storage of video data in random access memories.

35. In response, the examiner respectfully submits that in some embodiments they teach storing in RAM but Ding also teaches implementing the storing on a Hard Disk Drive (see column 6, lines 1-13 and lines 49-67).

36. The applicants' argue that there is no motivation to combine the references.

37. In response, the examiner respectfully submits that both Ding and Law teach methods of separation of storage to increase the systems toleration of faults/errors. Ding further teaches duplication of the data across several storage devices (RAID), while Law teaches partitioning of data over memory areas.

38. The applicants' argue that there Oyamada doesn't teach disabling the data recovery procedure programmed on the hard disk prior to retrieving the data.

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39. In response, the examiner respectfully submits that Oyamada teaches, in column 2, lines 46 through column 3, lines 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image (see column 1, lines 7-20 and column 3, lines 19-51).

Conclusion

40. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

41. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G. Bonshock whose telephone number is (571) 272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

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43. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2-15-06
dgb



**RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173**